



Federal Communications Commission
Washington, D.C. 20554

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Sprint Corporation
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DA 17-169

Re: Sprint Corporation Request for Waiver to Permit 800 MHz Wideband Operations in Portions of Arizona Prior to Completion of 800 MHz Band Reconfiguration in the Entire NPSPAC Region, WT Docket No. 16-295; FCC File Nos. 0007374837, 0007374839, 0007374843 and 0007374823

Dear Mr. Goldstein:

In this letter, we grant a waiver request by Sprint Corporation (Sprint) that will allow Sprint to deploy its 800 MHz wideband operations in certain non-Border Area portions of the Arizona National Public Safety Planning Advisory Committee (NPSPAC) Region (Region 3) in which 800 MHz Band reconfiguration has been completed, even though it has not been completed in the entire Region.¹ Granting the Waiver Request will permit LTE deployment in the greater Phoenix metropolitan area, Flagstaff, and northern Arizona, providing Sprint's subscribers access to these valuable broadband wireless services while protecting the remaining public safety entities from harmful interference. We therefore find that granting the Waiver Request is in the public interest.

Section 90.209(b)(7) of the Commission's rules permits Economic Area-based 800 MHz Specialized Mobile Radio (SMR) licensees, such as Sprint, to deploy wideband operations in the 817-821/862-866 MHz portion of the SMR spectrum band in NPSPAC regions where 800 MHz band reconfiguration is still continuing, and in the 821-824/866-869 MHz portion of the SMR band only in NPSPAC regions where 800 MHz band reconfiguration has been completed.² On August 11, 2016, Sprint filed the Waiver Request so that it may

¹ Sprint Corporation Request for Waiver to Permit 800 MHz Wideband Operations in Portions of Arizona Prior to Completion of 800 MHz Band Reconfiguration in the Entire NPSPAC Region, FCC File Nos. 0007374837, 0007374839, 0007374843 and 0007374823 (filed Aug. 11, 2016) (collectively, Waiver Request); Sprint Corporation SUPPLEMENT to Request for Waiver to Permit 800 MHz Wideband Operations in Portions of Arizona Prior to Completion of 800 MHz Band Reconfiguration in the Entire NPSPAC Region (filed Aug. 23, 2016) (Aug. 23, 2016 Supplement); Sprint Corporation SUPPLEMENT to Request for Waiver to Permit 800 MHz Wideband Operations in Portions of Arizona Prior to Completion of 800 MHz Band Reconfiguration in the Entire NPSPAC Region (filed Dec. 20, 2016) (Dec. 20, 2016 Supplement). The Waiver Request covers Call Signs WPOH379, WPOH373, WPOH368, and WPOH366.

² 47 CFR § 90.209(b)(7). *See also Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees*, Report and Order, WT Docket 12-64, 27 FCC Red 6489, 6495-96 para. 12 (2012) (*800 MHz Wideband Order*). SMR licensees are authorized to operate in the 813.5-824/858.5-869 MHz portion of the 800 MHz band only in the Southeastern U.S. counties listed in Section 90.614(c). *See* 47 CFR § 90.209(b)(7); *800 MHz Wideband Order* at 6490 para. 1 n.1. The NPSPAC Region where Sprint requests relief does not contain any of the listed counties.

deploy 800 MHz LTE operations at 821-824/866-869 MHz in certain, non-Border Area portions of the Arizona State NPSPAC Region prior to full completion of 800 MHz band reconfiguration in that Region.

Sprint states that in the Arizona NPSPAC Region, all but three of the public safety licensees – the State of Arizona, San Bernardino County, and Pima County – required to be retuned from the “old NPSPAC band” at 821-824/866-869 MHz have successfully completed their retunes.³ Sprint explains that these remaining retunes are “predominantly delayed by the need for Mexican-side 800 MHz incumbents to start and complete their retunes in order that the former Mexican channels can be made available for U.S. public safety licensees.”⁴ Sprint maintains that with careful engineering and planning, it can deploy 800 MHz LTE at over 500 sites in the Phoenix Metropolitan Area, Flagstaff, and northern Arizona without increasing the risk of interference to the remaining Arizona State NPSPAC Licensees.⁵

Sprint explains that Section 90.209(b)(7), however, prohibits broadband operations at 821-824/866-869 MHz anywhere in the Arizona State NPSPAC Region until each of the Arizona State NPSPAC Licensees has certified that it has completed its retune.⁶ Thus, Sprint notes, it cannot deploy broadband LTE in the old NPSPAC band in the areas of the Arizona State NPSPAC Region that are fully cleared of public safety operations, including the Phoenix Metropolitan Area, Flagstaff and northern Arizona.⁷

Sprint therefore requests a waiver of Section 90.209(b)(7) so that it may launch LTE in portions of the eight Arizona State NPSPAC Region counties⁸ in which 800 MHz rebanding is complete.⁹ Sprint notes that its planned sites in each of these counties are located more than 70 miles away from the Arizona public safety sites still operating in the old NPSPAC band.¹⁰ Sprint proposes to maintain a distance of more than 70 miles between co-channel operations to provide an additional buffer of protection to the remaining public safety operations, which, Sprint argues, exceeds the co-channel separation requirements in Section 90.621(b) of the Commission’s rules.¹¹

In addition, Sprint notes that it will, as required by the Commission’s rules, provide the remaining Arizona State NPSPAC Licensees with 30-days advance notice of Sprint’s deployment and planned initiation date of operations in the Arizona State NPSPAC Region.¹² Finally, Sprint states that if any public safety communications operator believes that its 800 MHz public safety radio system is experiencing CMRS-public safety interference at any time, a well-developed process exists to address interference via the industry-

³ See Waiver Request at 1; Aug. 23, 2016 Supplement at 1. When Sprint filed the Waiver Request on August 11, 2016, it stated that its request was contingent on Maricopa County, Arizona completing its 800 MHz system retune in the old NPSPAC band. At that time, Sprint indicated that Maricopa County was nearly complete with its retune. Waiver Request at 1. On August 23, 2016, Sprint reported that Maricopa County had completed its retune. Aug. 23, 2016 Supplement at 1.

⁴ Waiver Request at 2. Sprint states that it, the FCC, and the State Department are working to facilitate these actions. *Id.*

⁵ See *id.* at 2-3.

⁶ See *id.* at 3.

⁷ See *id.* at 2-3.

⁸ These counties are: Mohave, Coconino, Yavapai, Navajo, Apache, Gila, Maricopa and Pinal. *Id.* at 3, Attach. A.

⁹ See *id.* at 3.

¹⁰ *Id.*

¹¹ See *id.* Section 90.621(b) specifies a minimum separation distance of 70 miles, while Section 90.621(b)(4) permits 800 MHz co-channel usage at sites as close as 55 miles depending on the technical parameters of the proposed facilities. 47 CFR §§ 90.621(b), 90.621(b)(4).

¹² See Waiver Request at 4 n.12. The 30-day notification is required by Section 90.209(b)(7). 47 CFR § 90.209(b)(7). See also 800 MHz Wideband Order at 6495 para. 14.

developed and maintained interference notification website at <http://www.publicsafety800mhzinterference.com>.¹³

On August 23, 2016, Sprint provided concurrences to the Waiver Request from two of the remaining three public safety incumbents in Arizona – Pima County and the State of Arizona.¹⁴ Although Sprint also requested concurrence from San Bernardino County, the county has made no filing either in favor of or against the waiver request, and Sprint indicated that it did not plan to reach out more than once to the county, which was at the time dealing with ongoing wild fires.¹⁵ Sprint noted, however, that San Bernardino County previously had agreed to similar Sprint waiver requests in both Northern California and Nevada and that all of Sprint's facilities would be located more than 70 miles from any of the county's yet-to-be retuned facilities. In addition, on December 20, 2016, Sprint submitted maps and data demonstrating that Sprint's proposed sites are separated from the county's remaining three sites in Mohave, San Bernardino, and La Paz counties by distances ranging from 75-117 miles.¹⁶

On September 19, 2016, the Commission issued a *Public Notice* seeking comment on the Waiver Request.¹⁷ One Arizona State NPSPAC Licensee – Maricopa County, Arizona (Maricopa) – submitted comments in response to the *Public Notice* arguing that the Waiver Request is premature.¹⁸ Maricopa states that it experiences interference on its new frequencies and that it, in conjunction with Sprint and Verizon Communications, has been unable to determine the source of such interference. Maricopa argues that additional use of the spectrum could further complicate interference resolution. Maricopa maintains that it should have access to its "old" frequencies in the event it needs to temporarily revert back to its old spectrum.¹⁹ Maricopa argues that Commission should delay the grant of the Waiver Request until its interference issues are mitigated. If the Commission elects to grant the Waiver Request, Maricopa asks that the Commission simultaneously lift the licensing freeze on public safety's use of 800 MHz interleaved spectrum.²⁰ No other comments were filed.

On November 3, 2016, Sprint filed reply comments providing additional information related to the Waiver Request.²¹ Sprint states that the interfering signals experienced by Maricopa are irregular and intermittent and have not been witnessed by Sprint.²² Sprint maintains that public safety licensees have rarely been permitted to revert to old frequencies after a retune has been completed.²³ Sprint states that it has participated in joint testing and made engineering resources available to facilitate the interference mitigation

¹³ Waiver Request at 4 n.15. Sprint explains that this website immediately notifies Sprint, as well as the other cellular carriers operating in a given area, to commence interference investigation and mitigation procedures in accordance with the Commission's mandated 24-hour interference response timelines and the requirements specified in Sections 90.674 and 22.974 of the Commission's rules. *Id.*

¹⁴ See Aug. 23, 2016 Supplement, Exhs. 1 and 2.

¹⁵ *Id.* at 1.

¹⁶ Dec. 20, 2016 Supplement, Attach. at 3.

¹⁷ *Wireless Telecommunications Bureau Seeks Comment on Sprint Waiver Request to Permit Broadband Operations in Portions of the Arizona NPSPAC Region*, Public Notice, WT Docket 16-295, 31 FCC Rcd 10507 (WTB MD 2016) (*Public Notice*).

¹⁸ See Maricopa County Comments.

¹⁹ *Id.* at 2.

²⁰ *Id.* at 3.

²¹ See Sprint Reply.

²² *Id.* at 3.

²³ *Id.* at 4.

efforts, even though it does not appear to be the source of the interference.²⁴ Moreover, Sprint contends that if the waiver is approved, the parties will have ample time to continue to investigate and resolve Maricopa's interference issues prior to any actual Sprint deployment.²⁵ In addition, Sprint argues that Maricopa's issues with the 800 MHz licensing freeze are not relevant to the pending Waiver Request.²⁶ Sprint also notes that since its earlier filings, the State of Arizona had completed its retune throughout the State of Arizona.²⁷

Pursuant to Section 1.925 of the Commission's rules, waiver may be granted if the petitioner establishes that: (1) the underlying purpose of the rule would not be served or would be frustrated by application to the instant case, and the grant of the waiver would be in the public interest; or (2) where the petitioner establishes unique or unusual factual circumstances, that application of the rule would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.²⁸

Based on the unusual factual circumstances described by Sprint, we find that a waiver is warranted in this case because application of the rule would inhibit LTE deployment in portions of eight of the Arizona State NPSPAC Region counties where retuning has been completed – including the Phoenix Metropolitan Area, Flagstaff and northern Arizona. As Sprint argues, it would be unduly burdensome to prohibit its subscribers' access to valuable broadband wireless services until the remaining two Arizona State NPSPAC Licensees complete their retuning from the old NPSPAC band, particularly where Sprint will maintain such a significant geographic separation between its sites and those of the Arizona State NPSPAC Region public safety entities. Such a constraint on broadband deployment and consumer choice is contrary to the public interest in light of measures (*i.e.* co-channel separation and advance notification) that will protect public safety entities from harmful interference.²⁹ We note that we have previously granted similar waivers where Sprint maintained a separation distance of at least 70 miles from the closest public safety site,³⁰ and we are not aware of occurrences of harmful interference resulting from those waivers. Our review of Sprint's Waiver Request leads us to conclude that similar relief is warranted here. We therefore waive Section 90.209(b)(7) to permit Sprint to accelerate its broadband deployment in the eight Arizona State NPSPAC Region counties listed in Attachment A. This waiver is specifically conditioned on the following:

- (1) In the eight (8) counties in the Arizona State NPSPAC Region listed in Attachment A, Sprint must maintain a minimum 70-mile co-channel separation between Sprint's proposed operations at 821-824/866-869 MHz and the closest public safety site still operational in the old NPSPAC band.
- (2) Sprint must provide each public safety entity listed in Attachment C with 30-days advance notice of Sprint's deployment and planned initiation date of operations in the Arizona State NPSPAC Region.
- (3) Sprint may not deploy LTE at 821-824/866-869 MHz in the seven (7) counties listed in Attachment B until 800 MHz band reconfiguration has been completed in the entire Arizona State NPSPAC Region.

²⁴ *Id.* at 4-5.

²⁵ *Id.* at 5.

²⁶ *Id.* at 6.

²⁷ *Id.* at 3.

²⁸ 47 CFR § 1.925.

²⁹ See *800 MHz Wideband Order* at 6495 para. 14.

³⁰ See *e.g. Sprint Corporation Request for Waiver to Permit 800 MHz Wideband Operations in Portions of Washington State (Region 43) Prior to Completion of 800 MHz Band Reconfiguration in the Entire NPSPAC Region*, WT Docket No. 15-156; FCC File Nos. 0006854547 and 0006854553, Order, 30 FCC Rcd 8490 (WTB MD 2015).

- (4) If Sprint receives a report that station(s) operating in the areas covered by this waiver are causing harmful interference to a public safety licensee, it shall immediately suspend operation under this waiver of such station(s) except for test transmissions to identify and eliminate the interference. Sprint may resume operation under this waiver of such station(s) after the interference has been successfully mitigated.

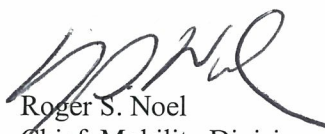
Further, Sprint's operations remain subject to the Commission's rules regarding abatement of unacceptable interference as set forth in Sections 90.672, 90.673, 90.674, and 90.675.³¹

As conditioned, our grant will facilitate more rapid broadband availability in the greater Phoenix metropolitan area, Flagstaff, and Northern Arizona, while protecting ongoing public safety operations in the old NPSPAC band until they are fully retuned. The conditions of this waiver will terminate when 800 MHz band reconfiguration has been completed in the entire Arizona State NPSPAC Region 3.

Finally, we find unpersuasive Maricopa's request that its old NPSPAC band frequencies remain available until it fully resolves its interference issues with its new frequencies. Rarely would the Commission permit reversion to a NPSPAC licensee's old frequencies after the licensee had retuned its license and we see no reason to grant such extraordinary relief here. As noted above, well-established procedures are in place to address interference issues. We expect these procedures to be successful here. In fact, Maricopa notes that it is working with Sprint and Verizon to investigate its interference events.³² In addition, Maricopa's request that we lift the freeze on 800 MHz interleaved spectrum is outside the scope of this Letter and we do not address it here.

Accordingly, IT IS ORDERED that, pursuant to Section 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and Sections 0.331 and 1.925 of the Commission's rules, 47 CFR §§ 0.331, 1.925, the Waiver Request is GRANTED to the extent described above.

Sincerely,



Roger S. Noel
Chief, Mobility Division
Wireless Telecommunications Bureau
Federal Communications Commission

³¹ See 47 CFR §§ 90.672, 90.673, 90.674 and 90.675.

³² Maricopa County Comments at 2.

Attachment A – List of Counties Subject to Waiver Request

Apache
Coconino
Gila
Maricopa
Mohave
Navajo
Pinal
Yavapai

Attachment B – List of Counties Excluded from Waiver Request

Cochise
Graham
Greenlee
La Paz
Pima
Santa Cruz
Yuma

Attachment C – List of Remaining Licensees in the Arizona State NPSPAC Region

San Bernardino County
Pima County